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A-S

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/172,533	10/14/98	GOOSEY	50278

IM22/0814

PETER F CORLESS
P O BOX 556
MARLBOROUGH MA 01752

EXAMINER
TALBOT, B

ART UNIT	PAPER NUMBER
1762	9

DATE MAILED: 08/14/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/172,533

Applicant(s)

GOOSEY ET AL.

Examiner

Brian K Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 22 May 2000 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Art Unit: 1762

1. The amendment filed 5/22/00 has been considered and entered. Claims 14-34 have been added. Claims –34 remain in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. In light of the amendment filed 5/22/00, the 35 USC 112, 102 and 103 rejections have been withdrawn. The following rejections have been necessitated by the amendment.

Claim Rejections - 35 USC § 103

4. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldstein (4,321,285) in combination with Kunzig (4,298,636).

Feldstein (4,321,285) teaches electroless plating whereby metallic surfaces are imparted to a non-conductive or dielectric substrate by an electroless coating process comprising coating the surface of the substrate with a hydrous oxide colloid of non-precious metal ions, such as cobalt, nickel, etc., reducing the selected metal ions to a reduced or zero valence state with a reducing agent and subsequently exposing the substrate to an electroless plating solution to form a metal layer (abstract). The reducing agent can include a borane or hydride. The electroless coating can be copper (col. 5, line 8 – col. 6, line 25).

Feldstein (4,321,285) fails to teach a non-colloidal metal activator and specific metals utilized for the activator.

Art Unit: 1762

Kunzig (4,298,636) teaches process for activating plastic surfaces for metallization by depositing noble metal complexes and reducing them to metal nuclei, i.e. reducing them to a lower oxidation state. The metal nuclei are then embedded in the plastic substrate to subsequently electrolessly plated. Metals included for the nuclei are silver, ruthenium, rhodium etc.

Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Feldstein (4,321,285) process by utilizing an activating solution as opposed to a colloid because of the expectation of achieving the expected results, i.e. an activated substrate.

With respect to the use of silver II v. silver I, it is the Examiner's position that one skilled in the art would have had a reasonable expectation of achieving similar success regardless of the valence of the catalytic silver as long as the silver is reduced to a zero valence state, i.e. metallic, so as to achieve a catalytic state. If applicant were to provide a showing that one skilled in the art would not achieve this results, i.e. comparing silver II v. silver I, the Examiner will reconsider his position.

With respect to oxidizing the activator, both references teach a metal hydroxide activator being reduced to a metallic nuclei. Hence, the references teach converting the metal, which has been formed into an "oxidized state", by reducing to form a metal nuclei. The limitation of "oxidizing" is deemed as being taught by the references.

Response to Amendment

5. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Tuesday-Friday 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the

Art Unit: 1762

organization where this application or proceeding is assigned are (703) 305-6078 for regular communications and (703) 305-6357 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.

A handwritten signature in black ink, appearing to read "B-K Talbot".

Brian K Talbot
Primary Examiner
Art Unit 1762

BKT
August 11, 2000